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PTO/SB/05 (2/98)

UTILITY PATENT APPLICATION TRANSMITTAL

(Only for nonprovisional applications under 37 CFR § 1.53(b))

Attorney Docket No. HERO-1-1097

First Inventor or Application Identifier BROWN

Title Aggregating and pooling information in a communication system with feedback

Express Mail Label No. EL476437636US

JC820 U.S. PTO 07/25/00

JC586 U.S. PTO 09/625080 07/25/00

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: Box Patent Application
Assistant Commissioner for Patents
Washington, D.C. 20231

1. [X] General Authorization Form & Fee Transmittal *(Submit an original and a duplicate for fee processing)*

2. [X] Specification [Total Pages] 26 *(preferred arrangement set forth below)*
   - Descriptive Title of the Invention
   - Cross References to Related Applications
   - Statement Regarding Fed sponsored R & D
   - Reference to Microfiche Appendix
   - Background of the Invention
   - Brief Summary of the Invention
   - Brief Description of the Drawings *(if filed)*
   - Detailed Description
   - Claim(s)
   - Abstract of the Disclosure

3. [X] Drawing(s) *(35 USC 113)* [Total Sheets] 2

4. Oath or Declaration [Total Pages]
   a. [ ] Newly executed (original or copy)
   b. [ ] Copy from a prior application (37 CFR 1.63(d)) *(for continuation/divisional with Box 17 completed)*
      i. [ ] DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b)

[ ] Incorporation By Reference *(useable if box 4b is checked)* The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered to be part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

6. [ ] Microfiche Computer Program *(Appendix)*

7. Nucleotide and Amino Acid Sequence Submission *(if applicable, all necessary)*
   a. [ ] Computer-Readable Copy
   b. [ ] Paper Copy (identical to computer copy)
   c. [ ] Statement verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

8. [X] Assignment Papers (cover sheet & document(s))
9. [X] 37 CFR 3.73(b) Statement *(when there is an assignee)* [X] Power of Attorney
10. [ ] English Translation Document *(if applicable)*
11. [ ] Information Disclosure Statement (IDS)/PTO-1449 [ ] Copies of IDS Citations
12. [ ] Preliminary Amendment
13. [X] Return Receipt Postcard
14. [ ] Small Entity Statement(s) [X] Statement filed in prior application, Status still proper and desired
15. [ ] Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
16. [X] Other: Check No. 2493 for $345

17. **If a CONTINUING APPLICATION,** *check appropriate box and supply the requisite information below and in a preliminary amendment*

[X] Continuation [ ] Divisional [ ] Continuation-In-Part (CIP) of prior Application No.: **09/160,970**

Prior application information: Examiner **G. Morgan** *Group / Art Unit* **2761**

[ ] Claims the benefit of Provisional Application No. _____

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Respectfully submitted,

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SIGNATURE Michael S. Smith Date July 25, 2000

Applicant or Patentee: Stephen J. Brown

Serial or Patent No.: 09/160,970

Filed or Issued: September 25, 1998

For: Aggregating and Pooling Information in a Communication System with Feedback

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS (37 C.F.R. § 1.9(f) and § 1.27(c)) SMALL BUSINESS CONCERN

I hereby declare that I am

☐ the owner of the small business concern identified below:

x an official of the small business concern identified below and empowered to act on its behalf.

NAME OF BUSINESS: Health Hero Network, Inc.

ADDRESS OF BUSINESS: 2570 W. El Camino Real, Suite 111, Mountain View, CA 94040

I hereby declare that the above-identified small business concern qualifies as a small business concern as defined in 13 C.F.R. § 121.3-18, and reproduced in 37 C.F.R. § 1.9(d), for purposes of paying reduced fees under Section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties control(s) or has (have) the power to control both.

I hereby declare that rights under contract or law have been conveyed to, and remain with, the small business concern identified above with regard to the invention entitled:

Aggregating and Pooling Information in a Communication System with Feedback

by inventor: STEPHEN J. BROWN

described in:

☐ the specification filed herewith

x application Serial No. 09/160,970, filed September 25, 1998

☐ Patent No. _____, issued _____.

If the rights held by the above-identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below and no rights to the invention are held by any person, other than an inventor who qualifies as an individual inventor pursuant to 37 C.F.R. § 1.9(c), who could not qualify as a small business concern under 37 C.F.R. § 1.99d) or by any concern which would not qualify as a small business concern under 37 C.F.R. § 1.9(d) or a non-profit organization under 37 C.F.R. § 1.9(e).*

*Note: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 C.F.R. § 1.27.)

FULL NAME:

ADDRESS:

☐ Individual ☐ Small Business Concern ☐ Non-Profit Organization

FULL NAME:

ADDRESS:

☐ Individual ☐ Small Business Concern ☐ Non-Profit Organization

FULL NAME:

ADDRESS:

☐ Individual ☐ Small Business Concern ☐ Non-Profit Organization

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small business entity is no longer appropriate. (37 C.F.R. § 1.28(b).)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1008 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which the verified statement is directed.

Health Hero Network, Inc.
2570 W. El Camino Real, Suite 111
Mountain View, CA 94040

Stephen J. Brown, President

Date 1/11/98

This application is submitted in the name of the following inventor:

Inventor	Citizenship	Residence City and State
Brown, Stephen J.	United States	Mountain View, California

The assignee is Health Hero Network, Inc., a California corporation having an office at 2570 West El Camino Real, Suite 111, Mountain View CA 94040.

Title of the Invention

Aggregating and Pooling Information in a Communication System with Feedback

Background of the Invention

1. Field of the Invention

This invention relates to aggregating and pooling information.

2. Related Art

In programs that have a number of participants, it sometimes is desirable to aggregate information from those participants, so as to indicate to individuals in a popu-

lation when the population (or a subset of that population) is achieving a selected goal. For example, in fund-raising events for an affinity group, it is often desirable to publicize to the individuals the progress of the fund-raising event toward a selected goal. Similarly, in an affinity group such as a weight-loss club, it would be advantageous to be able to publicize the collective results of the efforts of individuals in the affinity group.

One problem in the known art is that of collecting information from diverse sources, aggregating that information, and presenting that information to the individual members of the population. This problem is particularly exacerbated if the information to be collected is not available in any single location, and is further exacerbated if the individuals to receive the information to be publicized are not available in any single location.

The known art includes methods for aggregating and pooling information for bidding or otherwise conducting auctions using distributed communication systems. Some of these known methods include systems described as known art in the following applications:

- U.S. Application Serial No. 09/092,604, "Method for Conducting an On-Line Bidding Session with Bid Pooling," filed June 5, 1998, in the name of the same inventor, and assigned to the same assignee;

and

- U.S. Application Serial No. 08/603,131, filed February 20, 1996, issued on August 11, 1998, as U.S. Patent 5,794,219, in the name of the same inventor, and assigned to the same assignee.

These applications are hereby incorporated by reference as if fully set forth herein, and are collectively referred to herein as the "On-Line Bidding Disclosures." Although these applications describe other known art, no admission is made herein that any part of these applications are themselves known in the art.

In the On-Line Bidding Disclosures, individual users, coupled to a system using a communication network, are able to enter values into their client devices. The individual values are collected at a server device or other data clearinghouse. The individual values are aggregated or pooled. The aggregated or pooled information is used to determine whether the individual users, either individually or in sub-populations, are winners of the on-line auction.

Accordingly, it would also be advantageous to aggregate or pool information (whether medical, financial, or otherwise) so that the collective information could be publicized to participating individuals. This would be particularly advantageous in encouraging members of an affinity group to promote their individual efforts so as to cause the collective affinity group to achieve a selected goal, or in encouraging sub-populations of a population to promote their individual efforts so as to cause the collective efforts of

each sub-population to match or exceed other sub-populations. These advantages are achieved in embodiments of the invention in which each individual uses a client device to enter values (either over a period of time, or in response to a prompt by the client device), and in which the aggregated or pooled information is presented by means of a broadcast medium or other communication technique. For example, members of a weight-loss club can aggregate their individual weight-loss each day, so that the aggregated results can be announced on a popular television show or displayed at their client devices.

Summary of the Invention

The invention provides a method and system for aggregating and pooling information with feedback in a computer communication system. A communication system includes a server device and a set of client devices. Each client device collects information from an associated individual (whether by asking questions of those individuals, or accepting data input from peripheral devices), and transmits that data to a server device. The server device, or some other device at its behest, determines statistical information with regard to that data (such as aggregate, correlation, dispersion, or other measures), and provides that information to a communication channel for distribution to the individuals.

In a first preferred embodiment, the communication channel includes a broadcast communication channel that members of an affinity group can display. In a

second preferred embodiment, the communication channel includes redistributing the determined statistical measures to associated individuals using the client devices. In a first aspect, the invention includes distributing the computed statistical measure (such as an aggregate or sum) for the entire population. For example, the first aspect would include announcing a total weight-loss for a weight-loss club on a television show. In a second aspect, the invention includes comparing the computed statistical measure for a first sub-population against a similar statistical measure for a second sub-population. For example, the second aspect would include comparing total weight-loss for selected teams and awarding a prize or other benefit to the team with the best result.

Brief Description of the Drawings

Figure 1 shows a block diagram of a computer communication system for aggregating and pooling information.

Figure 2 shows a process flow diagram of a method for aggregating and pooling information in a computer communication system.

Detailed Description of the Preferred Embodiment

In the following description, a preferred embodiment of the invention is described with regard to preferred process steps and data structures. Embodiments of the

invention can be implemented using general purpose processors or special purpose processors operating under program control, or other circuits, adapted to particular process steps and data structures described herein. Implementation of the process steps and data structures described herein would not require undue experimentation or further invention.

Related Applications

Inventions described herein can be used in combination or conjunction with inventions described in the following patent application(s):

- Application Serial No. _____, Express Mail Mailing No. EE261914722US, filed September 23, 1998, in the name of Stephen J. Brown, titled "Modeling and Scoring Risk Assessment," assigned to the same assignee, attorney docket number HHN-003;

and

- Application Serial No. _____, Express Mail Mailing No. EI027453472US, filed September 23, 1998, in the name of Stephen J. Brown, titled "Reducing Risk Using Behavioral and Financial Rewards," assigned to the same assignee, attorney docket number HHN-004.

These applications are hereby incorporated by reference as if fully set forth herein.

System Elements

Figure 1 shows a block diagram of a computer communication system for aggregating and pooling information.

A system 100 includes a set of client devices 110, a communication path 120, a server device 130, and remote workstation 140.

Client Devices

The client devices 110 can be identical or can be of differing types. Thus, some client devices 110 can include the first type of client devices 110 as described below; some client devices 110 can include the second type of client devices 110 as described below, or some client devices 110 can include alternative types of client devices 110.

A first type of client device 110 includes a computer 111 (including a processor, memory, and mass storage), a set of web browser software 112, and a modem 113.

An embodiment of the first client device 110 is described in detail in the On-Line Bidding Disclosures.

The first type of client device 110 operates under control of the web browser software 112 and operating software to allow an operator 114 to perform web browsing activity. Known web browser software is available from Netscape Corporation or from Microsoft Corporation. Web browsing activity is described in documentation available from either of those companies.

The first type of client device 110 uses the modem 113 to send and receive messages using the communication path 120. The communication path 120 is described in further detail below.

A second type of client device 110 includes a "remote apparatus" such as described in the following patent application:

- Application Serial No. 08/847,009, filed April 30, 1997, in the name of Stephen J. Brown, titled "Monitoring System for Remotely Querying Individuals," assigned to the same assignee, attorney docket number RYA-126.

This application is hereby incorporated by reference as if fully set forth herein.

The second type of client device 110 includes a display 115, an input device 116, an input port 117, and a communication interface 118.

The second type of client device 110 uses the display 115 to inform the operator 114 that input information is desired. The operator 114 can comprise a patient, a caregiver for the patient, or some other person. Preferably, the display 115 includes an alphanumeric display capable of displaying a question or request to the operator 114.

The second type of client device 110 uses the input device 116 to receive an answer to the question or request. For example, if the question asks for the patient's weight that day, the operator 114 uses the input device 116 to input the patient's weight for that day. The input device 116 can include a keypad or keyboard, such as for a computer or a television remote control, or can include a more restricted set of keys by which the operator 114 can increment, decrement, or accept a value to be entered for the patient's weight for that day.

The second type of client device 110 uses the input port 117 to receive data from a measuring device or other device. For example, the display 115 can request that the operator 114 couple the second client device 110 to a medical scale with an electronic readout, and the input port 117 can receive the electronic readout so as to directly receive a signal corresponding to the patient's weight for that day.

The second type of client device 110 uses the modem 113 similarly to the first type of client device 110, to send and receive messages using the communication path 120.

In alternative embodiments, the client device 110 may includes a wide variety of other devices, possibly including an electronic toy (such as a "game boy" or "virtual pet"), a telephone inter-operating with an interactive voice response system, a television set-top box inter-operating with a cable or satellite television interactive system, a medical device operated at medical personnel office, or any other system by which the operator 114 can enter a value to be used by the system 110 for aggregation and response.

Communication Path

The communication path 120 includes a set of electronic communication links for sending and receiving messages between the client devices 110 and the server device 130.

In a preferred embodiment, the communication path 120 includes the internet, to which the client devices 110 and the server device 130 are coupled. The messages are formatted using a communication protocol for use with the internet, such as TCP/IP, HTML, or a combination thereof. In alternative embodiments, the modem 113 may be

replaced by any suitable communication interface, such as a direct communication link (such as a land-line or radio), another type of network link (such as a LAN, WAN, or combination thereof), or using another communication network (such as a private or public telephone network).

Server Device

The server device 130 includes a computer 131 (including a processor, memory, and mass storage), a database 132, and a modem 133. The server device 130 is similar to the "on-line auction company 12" described in detail in the On-Line Bidding Disclosures.

The server device 130 uses the modem 133 to send and receive messages using the communication path 120.

The server device 130 uses the database 132 to receive individual values entered by each client device 110, and to identify those individual values with their associated client device 110. The server device 130 also uses the database 132 to determine statistical measures of the pool of those values in response thereto.

In a preferred embodiment, the server device 130 operates in a similar manner as the "on-line auction company 12" described in detail in the On-Line Bidding Disclosures

In a first preferred embodiment, the server device 130 aggregates the individual values entered by each client device 110. The server device 130 determines an aggregate value for the set of individual values, and sends that aggregate value back to each client device 110. Each client device 110 then displays the aggregate value to each individual operator 114, for use by the operator 114 or by an associated person, such as the patient.

For example, if the individual values each represent the weight lost by the patient for that day, the server device 130 can aggregate those values to determine a total weight lost by the entire set of patients having client devices 110. The server device 130 can then feed back that information to each client device 110 so that each patient can be motivated to contribute to the group effort, even if that individual patient's contribution is relatively minor.

The aggregate value determined by the server device 130 can be any statistical measure or other calculated measure responsive to the set of individual values provided by the set of client devices 110. For example, the aggregate value can be a total (as described with reference to the On-Line Bidding Disclosures), a maximum or minimum

value, a median value, a selected centile value, a variance or standard deviation, or some other measure. It is expected that the aggregate value will have meaning to each individual patient associated with a client device 110, even if that individual patient's contribution to that aggregate is relatively minor.

In a second preferred embodiment, the server device 130 aggregates the individual values entered by each client device 110, but determines the aggregate values with regard to a set of affinity groups with which each individual is associated. As described in the On-Line Bidding Disclosures, each individual operator 114 at each individual client device 110 can choose to associate themselves with one or more selected affinity groups. As described in the On-Line Bidding Disclosures, these affinity groups contest against each other to obtain the "best" aggregate value. For example, in an on-line auction, the best aggregate value is the highest total bid.

The server device 130 determines a separate aggregate value for each affinity group, and feeds back those separate aggregate values to each client device 110 (or to just those client devices 110 associated with the selected affinity group).

For example, if the individual values each represent the weight lost by the patient for that day, the server device 130 can determine separate aggregate values for each affinity group, to determine a total weight lost by the entire set of patients in each affinity group. The server device 130 can then feed back that information to each client

device 110 so that each patient can be motivated to contribute to their selected affinity group effort, even if that individual patient's contribution is relatively minor.

The individual values and the separate aggregate values can be selected from a wide variety of possible values, so as to promote individual well being on behalf of each patient, and on the part of each selected affinity group.

For a first example, the individual values can be the measured height and weight for each patient, and the aggregate value (whether a single aggregate value or a set of separate aggregate values) can be a deviation from ideal weight for the entire affinity group.

For a second example, the individual values can be monetary contributions to a charitable or other financial cause, and the aggregate value (whether a single aggregate value or a set of separate aggregate values) can be a total monetary contribution.

For a third example, the individual values can be sales made by field salespersons for a company or product, and the aggregate value (whether a single aggregate value or a set of separate aggregate values) can be a total amount of sales.

/ / /

Remote Workstation

A remote workstation 140 is coupled to the server device 130, so as to access information in the database 132 and to receive the aggregate values (whether a single aggregate value or a set of separate aggregate values).

The remote workstation 140, similar to the first type of client device 110, includes a computer 141 (including a processor, memory, and mass storage), a set of database software 142 or other display software (such as a set of web browser software), and a modem 143.

The remote workstation 140 uses the database software 142 or other display software to access the database 132. In accessing the database 132, the remote workstation 140 can receive the aggregate values (whether a single aggregate value or a set of separate aggregate values), or can receive selected sets of individual values from the client devices 110.

The remote workstation 140 uses the modem 143 similarly to the way the client device 110 or the server device 110 use their respective modems.

An operator 144 at the remote workstation 140 can use the database software 142 or other display software to add a broadcast message to the database 132. The

server device 130, when feeding back the aggregate value, sends the broadcast message to the client devices 110.

The broadcast message can be a congratulatory message relating to the resultant aggregate value, an exhortatory or inspirational message for the one or more selected affinity groups, or a commercial or political message to one or more selected affinity groups.

For a first example, if the resultant aggregate value indicates that a weight-loss club has collectively lost 10,000 pounds of weight in one day, and this is a new record, the broadcast message can indicate the new record and congratulate all patients, even those whose contribution was relatively minor.

For a second example, the broadcast message can be a daily inspirational message for an affinity group, selected by the operator 144 at the remote workstation 140.

For a third example, the broadcast message can be a prize announcement (or an announcement of another benefit) to the individual patient who contributes most to the aggregate value. Similarly, when there are multiple affinity groups, the broadcast message can announce a prize or other benefit to the team with the best result.

/ / /

Method of Operation

Figure 2 shows a process flow diagram of a method for aggregating and pooling information in a computer communication system.

A method 200 includes a set of flow points to be reached, and steps to be performed, by elements of the system 100, including the client devices 110, the server device 130, and the remote workstation 140.

Client/Server Feedback

At a flow point 210, the system 100 is ready to receive individual values from client devices 110.

At a step 211, client devices 110 receive individual values from their associated operators 114. As noted above, each client device 110 can receive an individual value in response to a question-and-answer session, or can receive an individual value in response to a coupled data-collection device.

At a step 212, client devices 110 send their individual values to the server device 130. Operators at each client device 110 can select an affinity group in response to a menu of affinity groups presented by the server device 130.

At a step 213, the server device 130 receives the individual values and records them in the database 132.

At a step 214, the server device 130 determines one or more aggregate values (either a single aggregate value or a set of separate aggregate values) in response to the set of individual values.

At a step 215, the server device 130 feeds back the one or more aggregate values to the client devices 110.

At a step 216, the client devices 110 display the fed back aggregate values to their associated operators 114.

The method 200 thereafter proceeds with the flow point 210 again, such as a next day. For example, the method 200 can be selected to operate at a same or similar time each day.

Client/Workstation Feedback

At a flow point 220, the remote workstation 140 is ready to receive individual values or aggregate values from the server device 130.

At a step 221, the remote workstation 140 receives individual values or aggregate values from the server device 130.

At a step 222, the operator 144 at the remote workstation 140 examines the received individual values or aggregate values.

At a step 223, the operator 144 at the remote workstation 140 enters a broadcast message to be sent to client devices 110.

At a step 224, the remote workstation 140 sends the broadcast message to the server device 130.

At a step 225, the server device 130 sends the broadcast message to selected client devices 110 (or to all of them).

The method thereafter proceeds with the flow point 220 again, such as a next day. For example, the method 200 can be selected to operate at a same or similar time each day.

Alternative Embodiments

Although preferred embodiments are disclosed herein, many variations are possible which remain within the concept, scope, and spirit of the invention, and these variations would become clear to those skilled in the art after perusal of this application.

Claims

1. A method of aggregating information for individuals in a population thereof, said method including steps for

collecting information for each individual at a client device associated with said individual;

sending said information from said client device to a server device;

determining statistical information with regard to said information collected from a plurality of said client devices; and

distributing said statistical information to said individuals.

2. A method as in claim 1, wherein said steps for collecting information include steps for

coupling said client device to a data collection element for said individual: and

collecting said information from said data collection element.

3. A method as in claim 1, wherein said steps for collecting information include steps for

prompting said individual, at said client device, for said information; and

collecting said information from said individual in response to said steps for prompting.

4. A method as in claim 1, wherein said steps for determining statistical information include steps for

determining a first statistical measure for a first sub-population of said individuals; and

determining a second statistical measure for a second sub-population of said individuals.

5. A method as in claim 1, wherein

said steps for determining statistical information include steps for (1) determining a first statistical measure for a first sub-population of said individuals, and (2) determining a second statistical measure for a second sub-population of said individuals; and

said steps for distributing include steps for distributing both said first statistical measure and said second statistical measure.

6. A method as in claim 1, wherein

said steps for determining statistical information include steps for (1) determining a first statistical measure for a first sub-population of said individuals, and (2) determining a second statistical measure for a second sub-population of said individuals; and

said steps for distributing include steps for (1) comparing said first statistical measure and said second statistical measure, and (2) distributing a result of said steps for comparing.

7. A method as in claim 1, wherein

said steps for determining statistical information include steps for (1) determining a first statistical measure for a first sub-population of said individuals, and (2) determining a second statistical measure for a second sub-population of said individuals; and

said steps for distributing include steps for (1) comparing said first statistical measure and said second statistical measure, and (2) awarding a benefit in response to a result of said steps for comparing.

8. A method as in claim 1, wherein said steps for distributing include broadcast communication.

9. A method as in claim 1, wherein said steps for distributing include sending said statistical information from said server device to at least one said client device.

10. A method including steps for

entering, at each one of a set of client devices, a value associated with said client device;

sending, for each one of said client devices, said value to a server device;

determining, at said server device, an aggregate value in response to said values;

sending, from said server device to said client devices, said aggregate value; and

displaying, at said client devices, said aggregate value.

11. A system for aggregating information for individuals in a population thereof, said system including

a set of client devices, each disposed for collecting an individual value for an individual associated therewith;

a server device, disposed for receiving said individual values, and for determining at least one aggregate value in response thereto;

a communication path between said client devices and said server device;

wherein said server device distributes said at least one aggregate value to a plurality of said client devices.

12. A system as in claim 11, wherein at least one said client device includes a data collection element disposed for measuring said individual value for said individual.

13. A system as in claim 11, wherein at least one said client device includes

a display element, said display element capable of prompting said individual, at said client device, for said individual value; and

an input element, said input element disposed for collecting said individual value in response to said display element.

14. A system as in claim 11, wherein said at least one aggregate value includes

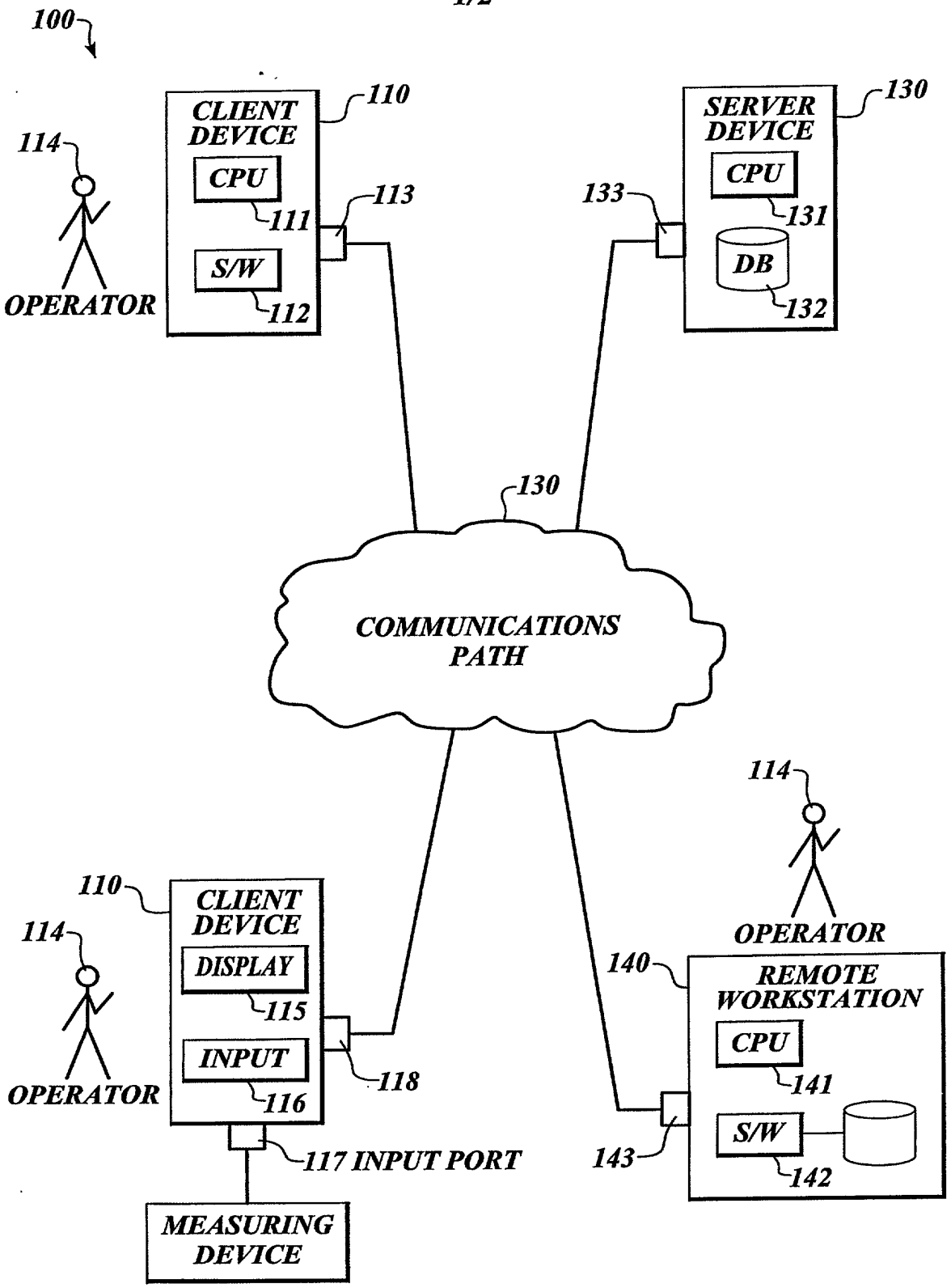
a first aggregate value for a first affinity group of said individuals; and

a second aggregate value for a second affinity group of said individuals.

15. A system as in claim 11, wherein said communication path includes broadcast communication.

Abstract of the Disclosure

The invention provides a method and system for aggregating and pooling information with feedback in a computer communication system. A communication system includes a server device and a set of client devices. Each client device collects information from an associated individual (whether by asking questions of those individuals, or accepting data input from peripheral devices), and transmits that data to a server device. The server device, or some other device at its behest, determines statistical information with regard to that data (such as aggregate, correlation, dispersion, or other measures), and provides that information to a communication channel for distribution to the individuals. The communication channel can include either (1) a broadcast communication channel that members of an affinity group can display, or (2) redistributing the determined statistical measures to associated individuals using the client devices. The statistical measure (such as an aggregate or sum) can be computed and distributed for the entire population, or can be computed and compared for selected sub-populations as a contest.


100
CLIENT DEVICE
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114
OPERATOR
SERVER DEVICE
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131
DB
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133
130
COMMUNICATIONS PATH
114
OPERATOR
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REMOTE WORKSTATION
CPU
141
S/W
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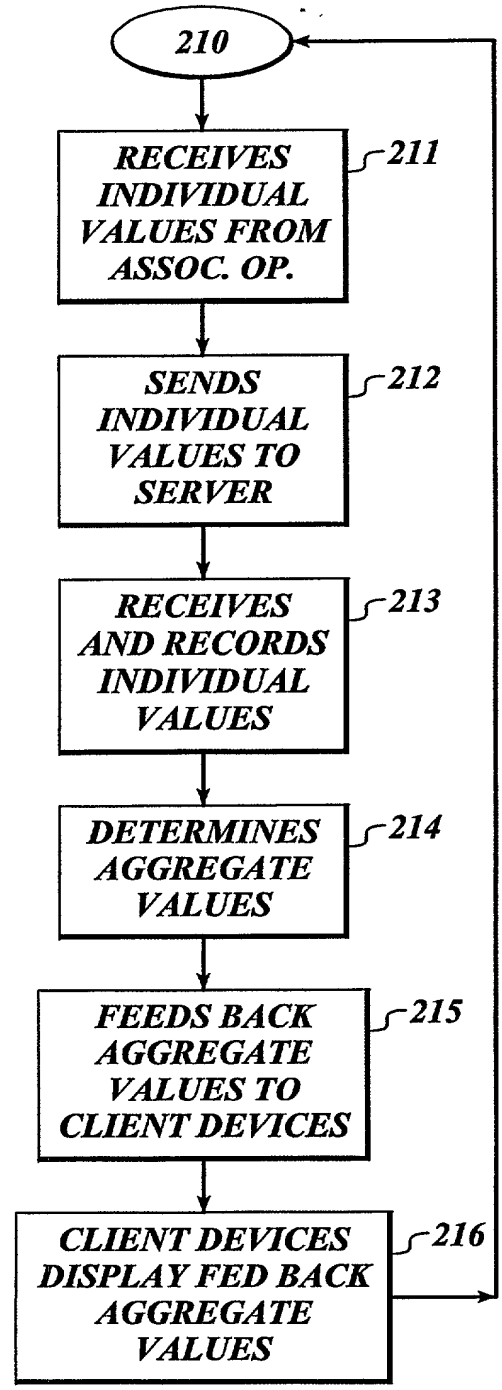
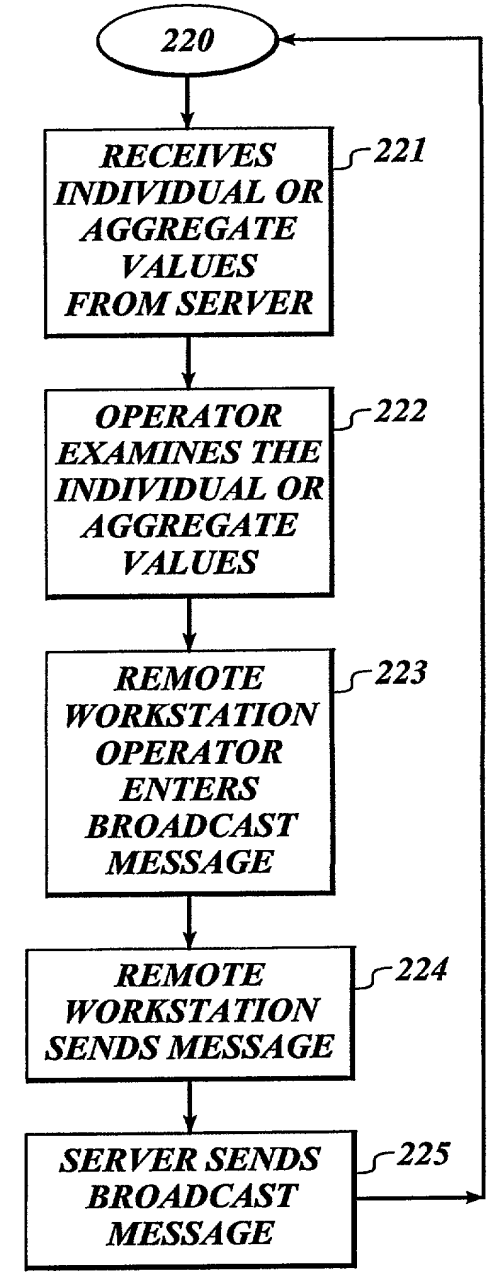
CLIENT DEVICE
DISPLAY
115
INPUT
116
118
114
OPERATOR
117 INPUT PORT
MEASURING DEVICE

Fig. 1



CLIENT/SERVER FEEDBACK



CLIENT/WORKSTATION FEEDBACK

Fig. 2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assignee:	Health Hero Network, Inc.	Attorney Docket No:	HERO-1-1074
Patent No.:	5,601,435	Reel/Frame No.:	9781/0585
Date of Patent:	February 11, 1997	Recordation Date:	February 26, 1999
Title:	METHOD AND APPARATUS FOR INTERACTIVELY MONITORING A PHYSIOLOGICAL CONDITION AND FOR INTERACTIVELY PROVIDING HEALTH RELATED INFORMATION		

REVOCATION AND POWER OF ATTORNEY

TO THE ASSISTANT COMMISSIONER FOR PATENTS:

Health Hero Network, Inc., declares in accordance with 37 C.F.R. 3.73 (b) that it is the owner of the entire right, title, and interest in the above-referenced U.S. Patent, as evidenced by the assignment recorded in the Patent and Trademark Office on February 26, 1999, at Reel 9781, Frame 0585. Health Hero Network, Inc., as the assignee in the present U.S. Patent, hereby revokes all previous powers of attorney given and filed in this U.S. Patent application and hereby appoint(s) the firm of Black, Lowe & Graham[PLLC] and Richard T. Black, Washington State Bar No. 20,899 and PTO Reg. No. 40,514; David A. Lowe, Washington State Bar No. 24,453 and PTO Reg. No. 39,281; Lawrence D. Graham, Washington State Bar No. 25,402 and PTO Reg. No. 40,001; and Michael S. Smith, Reg. No. 39, 563; as its attorneys with full power of substitution and revocation to prosecute this U.S. Patent application to issuance, and to transact all business in the United States Patent and Trademark Office connected therewith and to receive the Letters Patent.

Please address all further correspondence relating to this application to:

Michael S. Smith
Black Lowe & Graham [PLLC]
816 Second Avenue
Seattle, Washington 98104

The undersigned is empowered to sign this statement on behalf of the assignee.

Date April 7, 2000

Name Stephen J. Brown
Title CEO